



Department of Energy  
Washington, DC 20585

DEC 4 2006

EXEC-2006-015122

MEMORANDUM FOR THE DEPUTY SECRETARY

FROM: INGRID KOLB *Ingrid Kolb*  
DIRECTOR, OFFICE OF MANAGEMENT

SUBJECT: ACTION: Approval of Revised Alternative Selection and Cost Range for the Capability Replacement Laboratory (CRL) Project at Pacific Northwest National Laboratory (PNNL).

ISSUE: Following approval of the Alternative Selection and Cost Range (CD-1) in December 2005, the Office of Science conducted additional planning and analysis and determined that to achieve the project objectives and remain within the cost constraints the project acquisition strategy must be revised.

BACKGROUND: The Office of Science briefed you on November 7, 2006, on the revised acquisition approach for the CRL project at PNNL. The revised approach delineates more clearly the scope, cost, and sponsoring participants for acquiring the CRL capability.

DISCUSSION: Based on the discussion held on November 7, 2006, the attached memorandum documents the approval of the revised acquisition approach and project funding strategy for the Office of Science's CRL project.

SENSITIVITIES:

POLICY IMPACT: None

RECOMMENDATION: Sign the attached memorandum to the Under Secretary for Science

APPROVE: *Clay Sell*

DISAPPROVE: \_\_\_\_\_

DATE: DEC 15 2006





The Deputy Secretary of Energy  
Washington, DC 20585

December 15, 2006

MEMORANDUM FOR RAYMOND ORBACH  
UNDER SECRETARY FOR SCIENCE

FROM:

CLAY SELL

SUBJECT:

Approval of Revised Alternative Selection and Cost  
Range (CD-1 Revised) for the Capability Replacement  
Laboratory (CRL) Project at Pacific Northwest National  
Laboratory (PNNL).

I approve your request for a revised acquisition approach for the Capability Replacement Laboratory (CRL) Project based on the meeting of November 7, 2006. This approval changes the previously approved scope and cost parameters for the project as follows:

- Critical Decision - 1 Revised (CD-I R) for the line item construction project will include the construction of a new Physical Sciences Facility (PSF) and modernization of the Radiochemical Processing Laboratory (Building 325) in the Hanford 300-Area. The Total Project Cost (TPC) for this line item portion of the CRL project is \$224M. This project will be funded with contributions described in the attached Memorandum of Understanding (Attachment 1).
- The total CRL project funding required is \$277.5M. This total reflects an additional \$53.5M to be funded from other sources including \$7.7M for maintaining and modifying 300-Area buildings 318, 331, and 350. Attachment 2 identifies the profile and strategy for these funds.
- The DOE Office of Environmental Management (EM) is responsible for providing utilities to the Hanford 300-Area.
- SC may continue to pursue third party financing for the Biological Sciences Facility (BSF) and the Computational Sciences Facility (CSF).
- The CRL will no longer include a new Life Science Facility (LSF). The life science function will remain in building 331.



The above acquisition approach and CD-1R do not change the approval conditions 1 and 2 of CD-1, dated December 23, 2005 (Attachment 3). Condition 3 is revised as below:

- Critical Decision - 4 criteria will be met when the research capabilities have been relocated to their new locations under the CRL and the surplus PNNL facilities within the Hanford 300-Area are ready to be transferred to EM. In addition, this work will be performed without interrupting the ongoing mission essential research programs.

cc: Under Secretary for Energy  
Under Secretary for Nuclear Security/Administrator for National Nuclear Security Administration  
Director, Office of Management  
Assistant Secretary for Environmental Management

#### Attachments

1. Memorandum of Understanding among the United States Nuclear Security Administration, and the United States Department of Energy, Office of Science, and the United States Department of Homeland Security on the Physical Sciences Facility Capability Replacement Laboratory at the Pacific Northwest National Laboratory
2. CRI Total Project Cost, PNNL Capability Replacement Laboratory Project Path Forward, November 2007
3. Approval of Critical Decision - 1, December 23, 2005

**DRAFT MEMORANDUM OF UNDERSTANDING**  
among the  
**THE UNITED STATES NATIONAL NUCLEAR SECURITY ADMINISTRATION,**  
and the  
**THE UNITED STATES DEPARTMENT OF ENERGY, OFFICE OF SCIENCE,**  
and the  
**THE UNITED STATES DEPARTMENT OF HOMELAND SECURITY**  
on the  
**PHYSICAL SCIENCES FACILITY CAPABILITY REPLACEMENT LABORATORY**  
**AT THE PACIFIC NORTHWEST NATIONAL LABORATORY**

**I. Purpose**

The purpose of this MOU is to establish a Funding Strategy among the Parties that, to the extent funding is appropriated and available, provides a predictable funding profile, critical to finishing this project on schedule and within budget.

**II. Common Agreement on Funding Strategy**

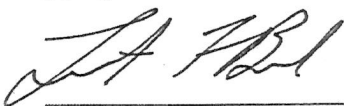
The three Parties are committed to their total funding shares for the Physical Science Facility (PSF) and refurbishment of Building 325 (in thousands): NNSA - \$69,623; DOE SC - \$98,444; DHS - \$55,934 for a total of \$224,000. The total cost for the Capability Replacement Laboratory (CRL) is \$277,500. The difference between \$224,000 and \$277,500, \$53,500, will be borne by other parties. The Office of Science will manage the overall project and will deal with any funding growth without additional costs to NNSA and DHS. The preferred funding schedule is:

Funding Strategy	Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Total
NNSA	\$18,470	\$7,920	\$0	\$37,919	\$3,625	\$1,689	\$69,623
SC	\$10,896	\$0	\$35,379	\$40,549	\$7,977	\$3,643	\$98,444
DHS	\$2,250	\$0	\$25,000	\$15,000	\$10,000	\$3,684	\$55,934
Subtotal PSF Line Item	\$31,616	\$7,920	\$60,379	\$93,468	\$21,602	\$9,016	\$224,000
Assumed Cong. Mark (SC)		+10,000*		-10,000*			
Assumed Cong. Mark (DHS)		+2,000*		-2,000*			
<b>Project Profile</b>	<b>\$31,616</b>	<b>\$19,920</b>	<b>\$60,379</b>	<b>\$81,468</b>	<b>\$21,602</b>	<b>\$9,016</b>	<b>\$224,000</b>

(\*) The total project profile in FY 2007 is based on the assumption that the lower of Congressional marks for the SC FY 2007 appropriation (\$10 M) is added. Contributions in FY 2009 will be reduced by the amount of any earmarks in the FY 2007 appropriation (e.g., DHS appropriation of \$2M added in 2007 and commensurate reduction in DHS contribution in 2009).

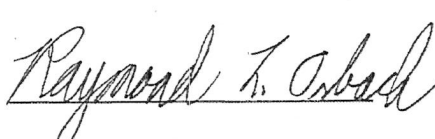
**III. Acceptance**

The preferred funding profile is shown above in Section II. The Parties recognize that specific annual amounts will depend on OMB and Congressional action. It is understood that, to the extent funding is appropriated and available, the Parties shall adhere to this profile.



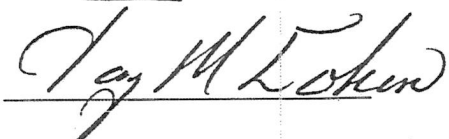
Ambassador Linton F. Brooks,  
Under Secretary and  
Administrator, National Nuclear  
Security Administration

Signed 11/7/06



Dr. Raymond L. Orbach,  
Under Secretary for Science,  
United States Department of  
Energy

Signed 11/7/06



Rear Admiral Jay M. Cohen, USN (ret.),  
Under Secretary for Science and  
Technology, United States  
Department of Homeland Security

Signed 11/7/2006

# CRL Total Project Cost

## Physical Sciences Funding Profile and Strategy

(thousands of dollars, including escalation and contingency)

Prior Years	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Total	Funding Strategy
\$18,470	\$7,920	\$0	\$37,919	\$3,625	\$1,689	\$69,623	NNSA
\$10,896	\$0	\$35,379	\$40,549	\$7,977	\$3,643	\$98,444	SC
\$2,250	\$0	\$25,000	\$15,000	\$10,000	\$3,684	\$55,934	DHS
<b>Subtotal PSF Line Item</b>	<b>\$7,920</b>	<b>\$60,379</b>	<b>\$93,468</b>	<b>\$21,602</b>	<b>\$9,016</b>	<b>\$224,000</b>	
Assumed Congressional Mark (SC)	10,000 <sup>1</sup>		-10,000				
Assumed Congressional Mark (DHS)	2,000		-2,000				
<b>PSF Project Profile</b>	<b>\$19,920</b>	<b>\$60,379</b>	<b>\$81,468</b>	<b>\$21,602</b>	<b>\$9,016</b>	<b>\$224,000</b>	
300 Area Utilities	\$0	\$1,600	\$4,900	\$5,500	\$0	\$12,000	EM
PSF Site Utilities	\$5,000	\$0	\$0	\$0	\$0	\$5,000	State of Washington
<b>Subtotal Utilities</b>	<b>\$5,000</b>	<b>\$1,600</b>	<b>\$4,900</b>	<b>\$5,500</b>	<b>\$0</b>	<b>\$17,000</b>	
<b>Modifications to Buildings 318, 331, and 350</b>	<b>\$0</b>	<b>\$450</b>	<b>\$1,700</b>	<b>\$5,550</b>	<b>\$0</b>	<b>\$7,700</b>	<b>PNNL/GPP</b>
Relocation of PSF capabilities to PSF <sup>2</sup> and 325	\$0	\$250	\$300	\$4,700	\$6,700	\$12,200	PNNL
Interim moves out of 300 Area	\$0	\$800	\$5,500	\$0	\$0	\$6,300	PNNL
Non PSF transition support	\$0	\$1,500	\$2,500	\$2,500	\$2,300	\$10,300	PNNL
<b>Subtotal Relocation</b>	<b>\$0</b>	<b>\$1,750</b>	<b>\$8,300</b>	<b>\$7,200</b>	<b>\$9,000</b>	<b>\$28,800</b>	
<b>Subtotal Other Funding Sources</b>	<b>\$5,000</b>	<b>\$3,350</b>	<b>\$7,900</b>	<b>\$12,750</b>	<b>\$9,000</b>	<b>\$53,500</b>	

<sup>1</sup> The total project profile in FY 2007 is based on the assumption that the lower of Congressional marks for the FY 2007 appropriation (\$10 M) is added. Contributions in FY 2009 will be reduced by the amount of any earmarks in the FY 2007 appropriation (e.g., DHS appropriation of \$2M added in 2007 and commensurate reduction in DHS contribution in 2009).

<sup>2</sup> PNNL Capability Replacement Laboratory Project Path Forward, Dr. Raymond Orbach Under Secretary for Science, November 2006



**The Deputy Secretary of Energy**  
Washington, DC 20585

December 23, 2005

MEMORANDUM FOR RAYMOND ORBACH  
DIRECTOR, OFFICE OF SCIENCE

FROM: CLAY SELL  
DEPUTY SECRETARY

SUBJECT: Approval of Critical Decision – 1, Approval of Alternative Selection and Cost Range, for the Capability Replacement (CRL) Project at Pacific Northwest National Laboratories (PNNL)

Based on the recommendation from the Energy Systems Acquisition Advisory Board (ESAAB) during a meeting conducted on December 15, 2005, I approve the following:

1. Critical Decision – 1 for PSF line item project (TPC range of \$200M to \$260M) allowing the design phase to begin;
2. Pursuing alternative financing proposals for other facilities to meet the mission need requirements; and
3. Relocating the radiological support services to PSF and vacating building 318.

The approvals are subject to the following conditions:

1. That the alternative financing proposals will be presented for my approval;
2. Safety requirements are fully incorporated and properly implemented into the project's design and construction in accordance with your memorandum dated December 5, 2005, and shall be addressed as part of the Critical Decision – 2 ESAAB briefing; and
3. That Critical Decision – 4 criteria will be met when the research capabilities have been relocated out of the 300 Area of the Hanford Site and the PNNL facilities are ready to be transferred to EM. This includes work associated with PSF and the remaining facilities without interrupting ongoing mission essential research programs.

I am designating the CRL project as a Major System Project due to its complexity and the joint funding between the Office of Science, the National Nuclear Security Administration, and the Department of Homeland Security.



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